Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A method for mitigating defect formation in a phosphosilicate glass layer, the method comprising forming an oxide cap upon the phosphosilicate glass layer via a chemical vapor deposition process and leaving the oxide cap over the phosphosilicate glass layer for a period of time of at least about three days.

2. Cancelled

3. (Currently Amended) A method for mitigating defect formation in a phosphosilicate glass layer of a semiconductor device, the method comprising:

forming ~~a~~ the phosphosilicate glass layer upon a substrate; and

forming a cap oxide layer upon the phosphosilicate glass layer, the cap oxide layer having a phosphorus blocking capability of at least 11 % by weight.

4. (Currently Amended) A method for mitigating defect formation in a glass layer of a semiconductor device, the method comprising:

forming ~~a~~ the glass layer upon a silicon substrate; and

forming a cap oxide layer upon the glass layer, the cap oxide layer being formed to a thickness of at least about 300 Angstroms.

5. (Currently Amended) A method for mitigating defect formation in a glass layer of a semiconductor device, the method comprising:

forming ~~a~~ the glass layer upon a substrate having at least one semiconductor layer formed thereon; and

forming a cap oxide layer upon the glass layer to mitigate defect formation in the glass layer for at least about a day.

6. (Previously Presented) The method as recited in claim 3, wherein forming the cap oxide layer upon the glass layer comprises forming the cap oxide layer via a chemical vapor deposition process.

7. (Currently Amended) A method for mitigating defect formation in a glass layer of a semiconductor device, the method comprising:

forming ~~a~~ the glass layer upon a substrate via a first chemical vapor deposition process; and

forming a cap oxide layer upon the glass layer via a second chemical vapor deposition process~~; wherein a reactor within which the first and second chemical vapor deposition processes are performed is not broken between the first and second chemical vapor deposition processes~~, the cap oxide layer protecting the glass layer from defect formation by shielding the glass layer from moisture which is present in an immediate vicinity of the cap oxide layer and which would result in the formation of defects if allowed to contact the glass layer.

8. (Currently Amended) The method as recited in claim 3, wherein the forming of a cap oxide layer upon the glass layer comprises forming an undoped oxide layer upon the glass layer.

9. (Currently Amended) A method for mitigating defect formation in a glass layer of a semiconductor device, the method comprising:

forming ~~a~~ the glass layer upon a substrate; and

forming a cap oxide layer upon the glass layer, the forming of a cap oxide layer comprising forming an undoped oxide layer upon a P doped oxide film, the cap oxide layer protecting the underlying glass layer from defect formation for a period of time of at least about a day.

10. (Currently Amended) A method for mitigating defect formation in a glass layer of a semiconductor device, the method comprising:

forming ~~a~~ the glass layer upon a substrate; ~~and~~

forming a cap oxide layer upon the glass layer~~; wherein at least one of the glass layer and the cap oxide layer is formed by a process selected from the group consisting of a plasma enhanced chemical vapor deposition process;, a sub-atmosphere chemical vapor deposition process;, and an atmospheric ambient chemical vapor deposition process~~; and

leaving the cap oxide layer over the glass layer for a day or longer.

11. (Previously Presented) The method as recited in claim 3, wherein the cap oxide layer is formed to have a thickness greater than 300 Angstroms.

12. Cancelled.

13. (Previously Presented) The method as recited in claim 3, wherein the cap oxide layer is formed by SiH4 and N2O reacting gases.

14. (Previously Presented) The method as recited in claim 3, wherein the cap oxide layer is formed by TEOS and O2 reacting gases.

15. (Previously Presented) The method as recited in claim 3, wherein the cap oxide layer process temperature is between approximately 350°C and approximately 600°C.

16. (Previously Presented) The method as recited in claim 3, wherein the glass layer process temperature is between approximately 450°C and approximately 650°C.

17. (Previously Presented) The method as recited in claim 3, wherein forming the cap oxide layer comprises forming at least one of inter-layer dielectric, inter-poly dielectric and inter-metal dielectric layers.

18-24. Cancelled

25. (New) The method as recited in claim 7, wherein a reactor within which the first and second chemical vapor deposition processes are performed is not broken between the first and second chemical vapor deposition processes.